FIG 1

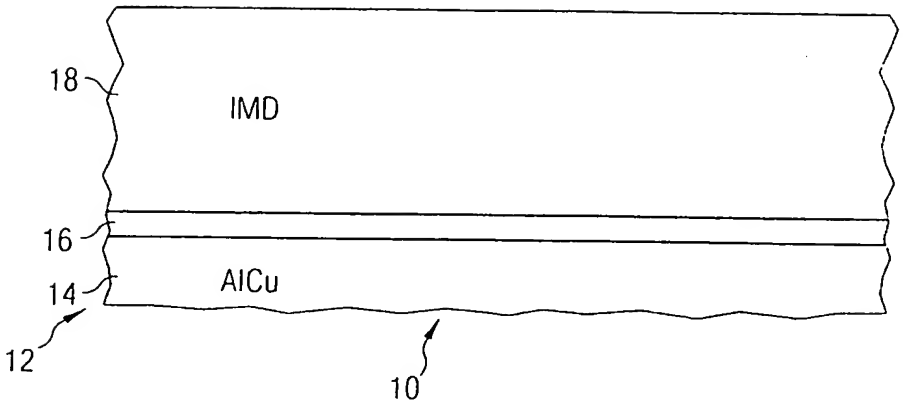

18
IMD
16
14
AlCu
12
10

FIG 2

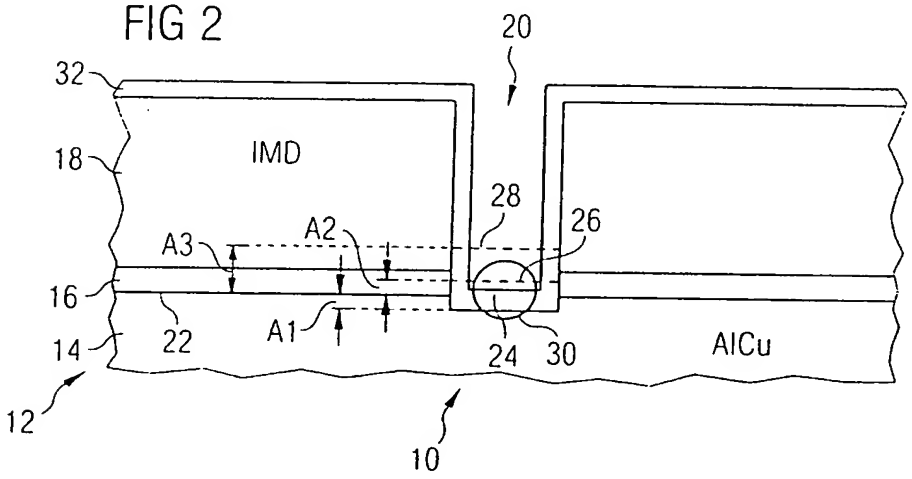

20
32
18
IMD
28
26
A3
A2
16
22
A1
14
24
30
AlCu
12
10

FIG 3

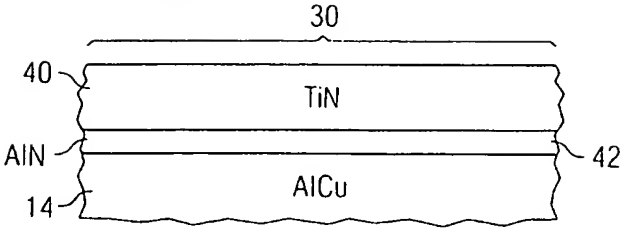

30
40
TiN
AlN
42
AlCu
14

FIG 4

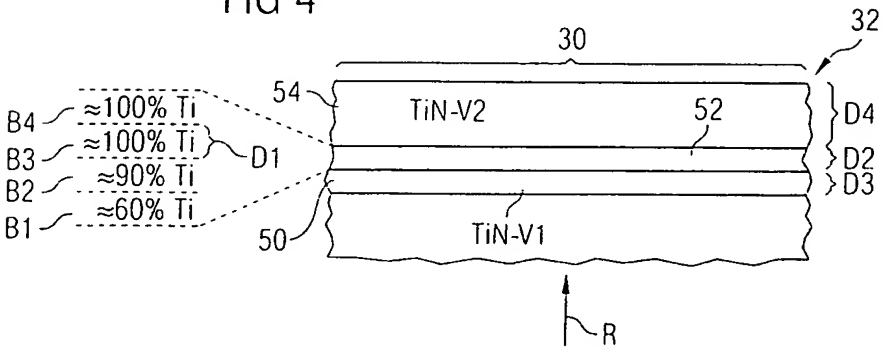

30
32
54
TiN-V2
52
D4
D2
D3
B4
≈100% Ti
B3
≈100% Ti
D1
B2
≈90% Ti
B1
≈60% Ti
50
TiN-V1
R

FIG 5

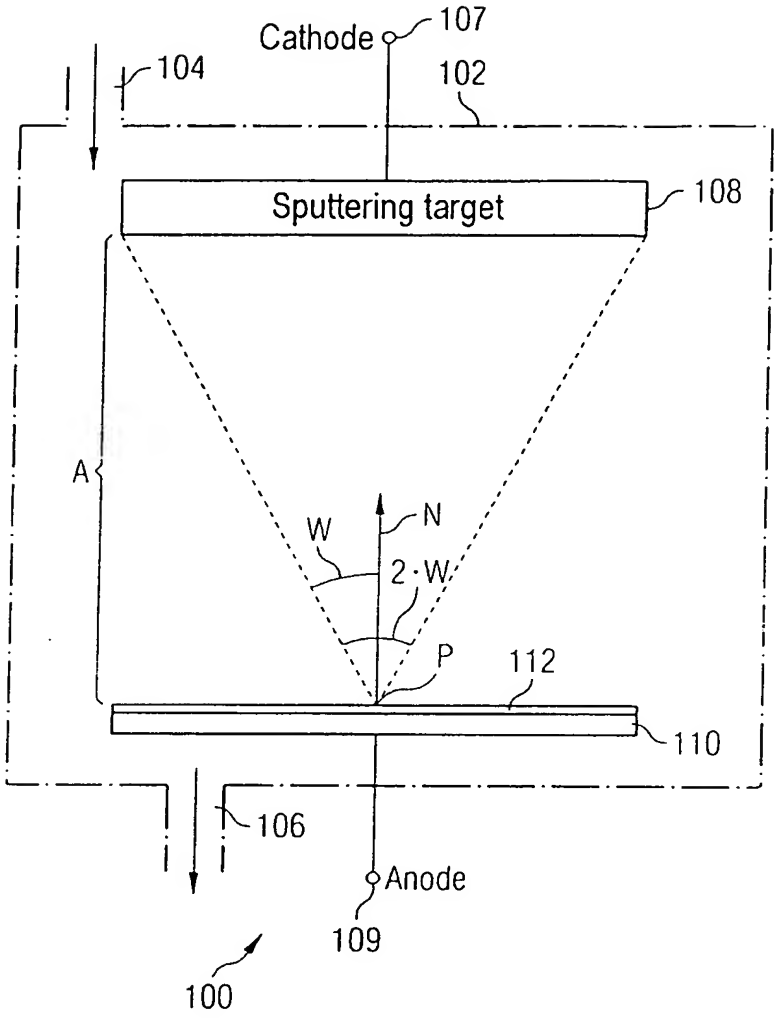
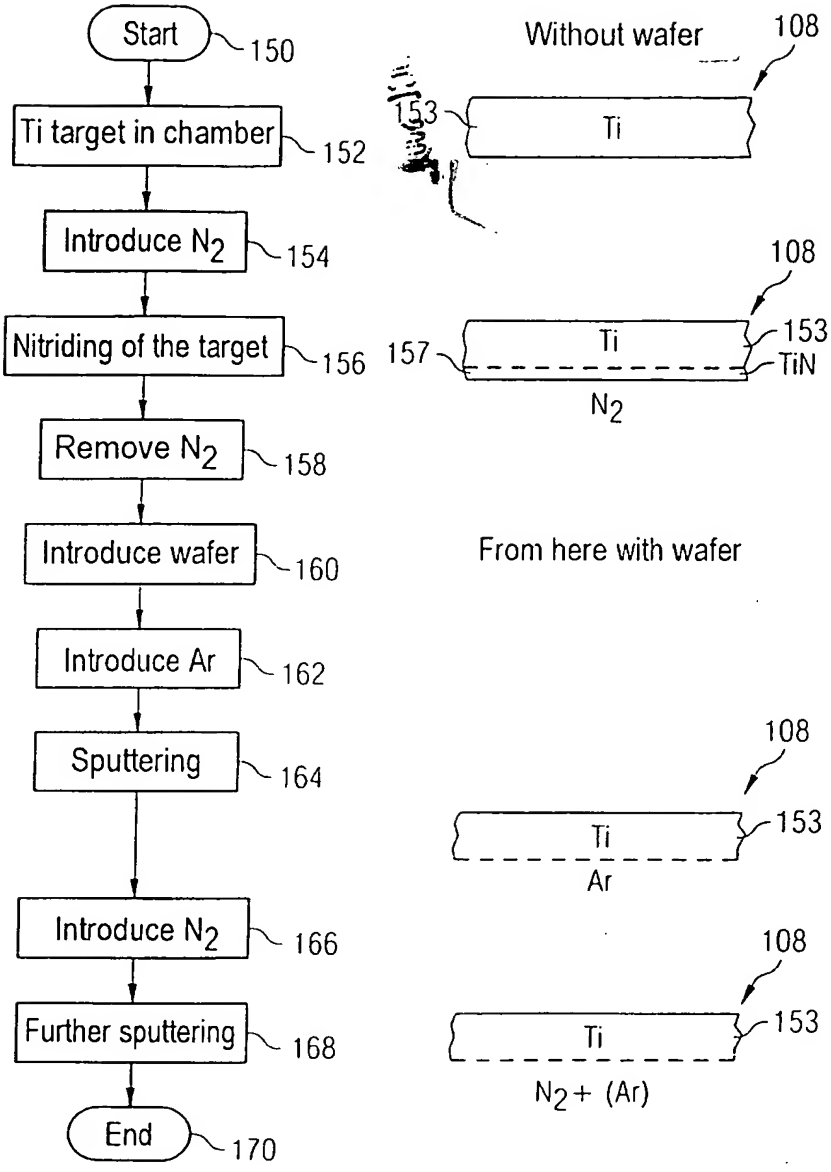

Cathode
107
104
102
Sputtering target
108
A
W
N
2·W
P
112
110
106
Anode
109
100

FIG 6


Start
150
Ti target in chamber
152
Introduce N_2
154
Nitriding of the target
156
Remove N_2
158
Introduce wafer
160
Introduce Ar
162
Sputtering
164
Introduce N_2
166
Further sputtering
168
End
170
Without wafer
108
153
Ti
108
153
Ti
157
TiN
N_2
From here with wafer
108
153
Ti
Ar
108
153
Ti
N_2+ (Ar)